

**REMARKS**

Claims 33, 34 and 45 are cancelled. Claims 27, 29, 32, 36 and 50 are amended.

Claims 27-44 and 46-66 remain active in this case.

Claims 32, 33, 48, 49 and 52 stand rejected under 35 U.S.C. 103(a) as being obvious over Burrows et al. '056.

However, Burrows et al. '056 neither discloses nor suggests the particular claimed ligands of amended claim 32 attached to a salicylimine-type compound. Further, Burrows et al. '056 would neither have disclosed nor suggested to one skilled in the art at the time the present invention was made that the claimed nickel-based ligand complexes could be used to advantage in binding to a specific nucleotide, detecting the bindings and optionally isolating the DNA region with a labeled complex. Certainly, this reference fails to either disclose or suggest the inclusion of a biotin label.

Hence, this ground of rejection is unsustainable and should be withdrawn.

Claims 27-34, 37-39, 43-59, 65 and 66 stand rejected under 35 U.S.C. 112, first paragraph.

However, in view of the above amendments, this ground of rejection is deemed moot.

Furthermore, in view of the above amendments, it is urged that rejoinder of non-elected method of use claims is appropriate, and, thus, respectfully requested. M.P.E.P. 821.04(b).

Finally, pursuant to paragraph 6, of the Office Action of June 27, 2007, the undersigned has, upon investigating, determined that the University Of Maryland and the University of Utah were joint owners of all inventions claimed herein at the time they were made. See the attached "JOINT INVENTION AGREEMENT."

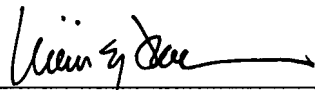
Accordingly, it is urged that this application is now in condition for allowance. Early notice of this effect is earnestly solicited. If the Examiner deems that any issues remain to be resolved, he is respectfully invited to contact the undersigned at (202) 659-6929.

Applicant hereby petitions for the Commissioner to charge any additional fees or any underpayment of fees which may be required to maintain the pendency of this case or credit any overpayment to Deposit Account No. 04-1061.

Respectfully submitted,

Dickinson Wright, PLLC

Date: September 25, 2007

By   
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LS-99-036

**JOINT INVENTION AGREEMENT  
UNIVERSITY OF UTAH  
and  
UNIVERSITY OF MARYLAND**

This Agreement is made and entered into this 5<sup>th</sup> day of July, 2000 (Effective Date), by and between the University of Maryland, a public agency and instrumentality of the State of Maryland and having an office at Office of Technology Commercialization, Building 930, College Park, Maryland 20742, U.S.A. (hereinafter referred to as "UNIVERSITY"), and UNIVERSITY OF UTAH, a corporation duly organized and existing under the laws of the State of Utah and having its principal office at Technology Transfer Office, 615 Arapeen Drive, Suite 110, Salt Lake City, Utah 84108, U.S.A. (hereinafter referred to as "UNIV of UTAH").

**WHEREAS**, Dr. Cynthia Burrows is a named inventor on the Invention and was an employee of UNIV of UTAH at the time the Invention was made ("Inventor"); and

**WHEREAS**, Dr. Steven Rokita is a named inventor on the Invention and was an employee of UNIVERSITY at the time the Invention was made ("Inventor"); and

**WHEREAS**, UNIVERSITY has entered into an agreement with its employee-Inventors pursuant to which they have assigned all right, title, and interest in the Invention to the UNIVERSITY and have agreed to assist UNIVERSITY in all aspects of patenting and marketing the Invention; and

**WHEREAS**, UNIV OF UTAH has entered into an agreement with its employee-Inventors pursuant to which they have assigned all right, title, and interest in the Invention to the UNIV OF UTAH and have agreed to assist UNIV OF UTAH in all aspects of patenting and marketing the Invention;

**WHEREAS**, UNIVERSITY and UNIV of UTAH, therefore, jointly own the Invention (described in the Invention Disclosure which is attached as Appendix A hereto) referred to as UNIVERSITY Case No. LS-99-036, and UNIV OF UTAH Case NO. U-2861, entitled "Nickel-Based Reagents for Detecting DNA and DNA-Protein Contacts," and created by Drs. Steven Rokita and Cynthia Burrows; and

**WHEREAS**, UNIVERSITY and UNIV OF UTAH wish to own, patent and license the Invention(s) jointly for their mutual benefit and that of their respective Inventors,

**NOW, THEREFORE**, in consideration of the promises and consideration set forth below, the legal sufficiency of which both Parties acknowledge, the Parties agree as follows:

**I. OWNERSHIP AND PATENT PROSECUTION**

- A. UNIVERSITY and UNIV OF UTAH shall be joint and equal owners of the Invention(s), any patent applications and resulting patents that are based on the Invention(s) in the United States or elsewhere.

- B. UNIV of UTAH hereby designates UNIVERSITY to serve as the lead party with respect to the filing, prosecution and maintenance of any and all applications for patent protection and resulting patents on the Invention(s) ("Patenting") for the mutual benefit of the Parties, and further agrees to provide assistance to and cooperate with UNIVERSITY in such Patenting efforts.
- C. UNIVERSITY agrees to provide UNIV of UTAH with reasonable opportunities to advise UNIVERSITY on Patenting; to keep UNIV OF UTAH informed on Patenting matters; to furnish UNIV OF UTAH with copies of all Patenting correspondence, including applications, and to obtain the consent of UNIV of UTAH prior to filing any U.S. regular patent application.
- D. The Parties mutually agree: (1) to use reasonable efforts to obtain the cooperation of their respective Inventors in Patenting and (2) to share equally all reasonable out-of-pocket expenses, including attorney's fees, incurred in Patenting the Invention(s) in the United States and Patent Cooperation Treaty ("PCT") countries, and for other foreign countries mutually agreed upon by the Parties or selected by a licensee(s). PCT countries and "other foreign countries" are hereafter designated foreign countries.
  - 1. UNIVERSITY agrees to maintain complete and accurate records of all Patenting expenses it incurs, and to submit invoices to UNIV of UTAH for reimbursement of half of all such expenses, unless Patenting expenses are reimbursed by a licensee(s) pursuant to Section II.B.3.
  - 2. UNIV of UTAH agrees to remit payment of its share of Patenting expenses to UNIVERSITY within sixty (60) days of receiving an invoice from UNIVERSITY.
- E. As a condition of filing applications in foreign countries, UNIVERSITY shall obtain the express written agreement of an option holder or a licensee to reimburse all expenses arising out of international Patenting activities or shall obtain the express prior written agreement of UNIV of UTAH to reimburse the UNIVERSITY for half of all such expenses.
- F. If either UNIV of UTAH or UNIVERSITY wishes to abandon or to cease prosecution of any patent application or patent on the Invention(s) ("Abandoned Rights") or fails to pay its share of Patenting expenses under this Agreement, such party ("Abandoning Party") will provide a minimum of thirty (30) days prior written notice to the other party (Continuing Party). The Continuing Party will have the right to continue prosecution or maintenance of the Abandoned Rights, at its sole discretion. If the Continuing Party so elects, it will be responsible for all out-of-pocket expenses incurred after the effective date of abandonment. The Abandoning Party will not receive its share for revenue associated with the Abandoned Rights after the effective date of abandonment. In other respects, revenue will continue to be distributed in accordance with Section II below.

## **II. LICENSING AND REVENUES**

- A. UNIV of UTAH hereby designates UNIVERSITY to have lead responsibility for diligently seeking one or more licensees of the Invention(s) and for negotiating, on behalf of itself and UNIV of UTAH, reasonable license agreements with any licensee(s).
- B. The Parties agree that a license agreement is reasonable if it includes terms that:
  - 1. Adequately protect the Parties from the unauthorized use of their names in connection with the Invention; and
  - 2. Require the licensee to indemnify, defend, and hold both Parties harmless from

any and all claims, actions, and proceedings, judicial or otherwise, judgments, damages, costs, and expenses, including attorneys' fees and court costs through the appellate levels, arising from or in connection with claims of patent infringement and/or product liability; and

3. Obligate at least an exclusive licensee(s) to assume all costs associated with Patenting the Invention.
- C. UNIVERSITY agrees to:
1. Keep UNIV of UTAH fully informed of the UNIVERSITY's progress in identifying a licensee and negotiating a license; and
  2. Provide UNIV of UTAH with meaningful opportunities to advise UNIVERSITY on the same, and
  3. Furnish UNIV of UTAH with copies of significant correspondence and marketing and licensing reports, if any, and all draft and fully executed license and option agreements.
  4. Use its best efforts in obtaining costs from one or more non-exclusive licensee.
- D. UNIV of UTAH agrees to:
1. Cooperate with and to obtain the agreement of its Inventors to cooperate with UNIVERSITY's efforts to identify potential licensees; and
  2. Keep UNIVERSITY fully informed of all inquiries and offers UNIV of UTAH receives from third parties concerning the Invention.
- E. The Parties agree that:
1. Any license agreements for the Invention will be made and executed jointly in the name of both Parties; and
  2. UNIVERSITY shall administer any licenses for the Invention and shall be reimbursed out of license revenues, in accordance with the provisions of Section II F1, for reasonable expenses that UNIVERSITY incurs in an effort to license the Invention.
- F. Gross revenue and equity received under any license agreement(s) for the Invention(s) will be distributed to the Parties as follows:
1. After the UNIVERSITY deducts a ten percent (10%) administration fee up to a maximum of five thousand dollars (\$5000) per year, revenue and equity received under any license agreement for the Invention(s) from license fees, royalties, and patent filing, prosecution and maintenance expense reimbursements will be shared equally by UNIV of UTAH and UNIVERSITY.
  2. Both parties will distribute revenue to their respective Inventors in accordance with each institution's inventor royalty-sharing policies.
  3. If either party elects, in accordance with Section I.F. to discontinue payment of Patenting expenses or abandons its rights in any patent applications or patents, notwithstanding the other provisions of this Section, the Abandoning Party shall have no further right to receive any share of revenue received in connection with the Abandoned Rights.

### III. PUBLICATION

- A. The Parties will use reasonable means to assure that their respective Inventors notify and furnish a manuscript to their respective institution of any intended publication relating to the Invention(s). UNIV of UTAH agrees to supply any such draft manuscript to the UNIVERSITY at least ninety (90) days prior to its submission for publication in

order that the UNIVERSITY may evaluate its content for inclusion of patentable subject matter relating to the Invention(s). UNIVERSITY agrees to notify the publishing Inventors and, when appropriate, the UNIV of UTAH within thirty (30) days after receipt of such a manuscript whether the UNIVERSITY intends to file a patent application in accordance with the terms and conditions of this Agreement. At the request of the UNIVERSITY, UNIV of UTAH agrees to obtain the consent of the publishing Inventors to delay publication to enable UNIVERSITY to prepare and file a patent application on any patentable subject matter, if any, described in the manuscript.

- B. The Parties agree not to disclose information about the Invention(s) to a third-party, including any entity that may have funded the research resulting in the Invention(s), without obtaining a non-disclosure agreement as a condition of receiving the information. The Parties shall mutually agree upon the form of the non-disclosure agreement.
- C. The Parties and their respective Inventors shall have the right to use the Invention(s) for noncommercial, internal purposes in support of the Parties' research and educational purposes.

#### **IV. INFRINGEMENT**

- A. Each party will promptly notify the other party, in writing, upon learning of an infringement of any patent contemplated by this Agreement, and will provide evidence of such infringement.
- B. The Parties agree to first attempt to resolve a claim of infringement without litigation.
- C. If the Parties mutually agree to commence an action for infringement, they will each pay one-half (½) of the reasonable expenses incurred in connection with such action and will each be entitled to one-half (½) of any and all recoveries that may be received.
- D. If the Parties cannot mutually agree to commence an action of infringement, either party shall have the right to bring such an action ("Prosecuting Party"). The Prosecuting Party shall bear all expenses incurred in connection with said action and shall be entitled to retain any and recoveries.
- E. The Parties agree to use their best efforts to assure that their respective Inventors cooperate with and supply assistance reasonably requested in connection with any patent infringement action.
- F. This Section is subject to any contrary provisions that may exist in license agreements for the Invention.

#### **V. TERM AND TERMINATION OF AGREEMENT**

- A. Unless terminated earlier pursuant to this Section, the Term of this Agreement shall begin on the Effective Date and terminate upon the last to occur of
  - 1. the expiration date of all U.S. and foreign patents issued for the Invention; or
  - 2. the expiration of a license agreement issued pursuant to this Agreement, if said license extends beyond the expiration date of the patents, or
  - 3. fifteen (15) years from the Effective Date.
- B. If the Parties do not execute a license to commercialize the Invention within two (2) years of the Effective Date, this Agreement will automatically terminate.
- C. Either party may terminate this Agreement ("Terminating Party") upon sixty (60) days prior written notice to the other party ("Continuing Party").

1. Within thirty (30) days after receiving the Terminating Party's notice, the Continuing Party will advise the Terminating Party, in writing, whether it wishes to retain rights in the Invention(s) and under any license agreement(s), patent application(s) and/or patent(s) on the Invention.
  2. The Parties will thereafter comply with all Federal Statutes regarding the return of the invention rights.
  3. Upon the transfer of its rights, the Terminating Party shall have no further rights or obligations with respect to the Inventions except for those obligations and rights that accrued prior to termination; e.g., to reimburse the other party for expenses incurred prior to termination, including any damages based on the Terminating Party's breach or default of provisions of this Agreement. The Continuing Party may thereafter license the Invention, without an accounting to the Terminating Party, provided that royalties that accrue from such licensing are shared equally with all Inventor(s), according to the policy of the Continuing Party.
- D. In the event neither party wishes to retain rights to the Invention, patent applications or patents thereon, such rights will be distributed or assigned consistent with each Party's internal policy.

## **VI. GENERAL**

- A. Any payment, notice or other communication pursuant to this Agreement shall be sufficiently made or given on the date of mailing if sent by certified first class mail, return receipt requested, postage prepaid, addressed to the receiving party at the address identified below:

**UNIVERSITY:**

James Poulos  
Executive Director  
Office of Technology Commercialization  
Building 930  
College Park, Maryland 20742

**UNIV of UTAH:**

Chris Jansen  
Director  
Technology Transfer Office  
615 South Arapahoe Way, Suite 110  
Salt Lake City, Utah 84108

- B. Neither party may transfer its rights under this Agreement without the prior written consent of the other party.
- C. No waiver by either party of any breach or default of any of the covenants or agreements set forth in this Agreement shall be deemed a waiver as to any subsequent or similar breach or default.
- D. If any provision of this Agreement shall be held to be invalid, illegal, or unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired thereby, provided that the intent of the Parties in entering into the Agreement is not materially affected thereby.
- E. This Agreement constitutes the entire Agreement between the parties concerning the subject matter hereof. All prior written agreements respecting the subject matter hereof are void. No amendment of this Agreement shall be binding on the parties unless mutually agreed to and executed in writing by each of the parties.

IN WITNESS WHEREOF, the parties have duly executed this Agreement the day and year set forth below.

UNIVERSITY OF MARYLAND

By: \_\_\_\_\_

James A. Poulos, III

Executive Director

Office of Technology Commercialization

Date: \_\_\_\_\_

July 5, 2000

UNIVERSITY of UTAH

By: \_\_\_\_\_

John Morris

Date: \_\_\_\_\_

August 8, 2000